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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,820	08/09/2006	David K. Robert	GB040037	6737

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
TABATABAI, ABOLFAZL	
ART UNIT	PAPER NUMBER
2624	
MAIL DATE	DELIVERY MODE
08/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/597,820	ROBERT, DAVID K.	
	Examiner	Art Unit	
	ABOLFAZL TABATABAI	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9,12 and 13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9,12 and 13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-7 are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. Supreme Court precedent[1] and recent Federal Circuit decisions[2] indicated that **a statutory "process" under 35 U.S.C. 101** must (**1**) be tied to a machine or (**2**) transform underlying subject matter (such as an article or material) to a different state or thing. While the instant claims recites a series of steps or acts to be performed, the claims neither transform underlying subject matter nor positively tie to a machine that accomplishes the claimed method steps, and therefore do not qualify as a statuary process. The recited steps "deriving a set of correlation results by correlating the information signal with a watermark for each of a plurality of relative positions of the information signal with respect to the watermark" and "analysing (65) the set of correlation results to identify a cluster of correlation results which exceed a threshold value, the cluster representing a possible correlation peak" neither transform underlying subject matter nor positively tie to a machine that accomplished the claimed method step. In order for process to be "tied" to a machine, the structure of a machine should be positively recited in a step or steps significant to the basic inventive concept, and NOT

just in association with statements of intended use or purpose, insignificant pre or post solution activity, or implicitly. Appropriate correction is required.

[1] *Diamond v. Diehr,* 450 U.S 175, 184 (1981); *Parker v. Flook,* 437 U. S 584,588, n.9 (1978); *Gottschalk v. Benson,* 409 U. S. 63, 70 (1972); *Cochrane v. Deener,* 94 U. S. 780, 787-88 (1876).

[2] *In re Bilski,* 88 USPQ2d 1385 (Fed. Cir. 2008).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3, 4, 6, 9, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Pelly et al (U. S. 7,085,395 B2).

Regarding claim 1, Pelly discloses a method of detecting a watermark in information signal, comprising:

deriving a set of correlation results (64) (claim 11, lines 63-66) by correlating the information signal with a watermark (Wi) for each of a plurality of relative positions of the

information signal with respect to the watermark (column 4, lines 30-46 and column 14, lines 35-63).

Regarding claim 3, Pelly discloses a method according to claim 1 wherein, if the step of analysing the set of correlation results identifies an isolated correlation result which exceeds the threshold value, the method further comprises determining if that isolated correlation result is the correlation result having the highest value within the set of correlation results (column 5, lines 22-36 and column 13, lines 53-61).

Regarding claim 4, Pelly discloses a method according to claim 1 wherein, if the step of analysing the set of correlation results identifies a plurality of clusters of correlation results, the method further comprises processing (66) the clusters to identify the cluster which is most likely to represent the true correlation peak (column 18, lines 1-9).

Regarding claim 6, Pelly discloses a method according to claim 4 wherein all clusters, other than the one selected as being the most likely, are discarded (page 5, column 2,lines 61-66).

Regarding claim 12, Pelly discloses apparatus for presenting an information signal comprising means for disabling operation of the apparatus in dependence on the presence of a valid watermark in the information signal, wherein the apparatus comprises a watermark detector according to claim 9 (column 7, lines 46-53).

Claims 9 and 13 are similarly analyzed as claim 1 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pelly et al (U. S. 7,085,395 B2) in view of Van Vugt et al (U. S. 2006/0198549).

Regarding claim 2, Pelly is silent about the specific details regarding a method according to claim 1 wherein the step of analysing (65) the set of results comprises determining all correlation results in the set which exceed the threshold value and then determining which of those correlation results are located within a predetermined distance of each other.

In the same field of endeavor (watermarking), however, Van Vugt discloses method of detecting watermarks comprises determining all correlation results in the set which exceed the threshold value and then determining which of those correlation results are located within a predetermined distance of each other [page 5, column 2, paragraph (0069)].

Regarding claim 5, Pelly is silent about the specific details regarding amethod according to claim 4 wherein the processing (66) comprises comparing the shape of the cluster of correlation results with stored shape information and selecting the cluster with the best match to the stored shape information [page 6, column 2, paragraphs (0077) and (0079)].

Regarding claim 7, Pelly is silent about the specific details regarding a method according to claim 1 wherein the threshold value is varied according to an expected correlation peak shape and/or height [page 4, column 2, paragraph (0059)].
It would have been obvious to a person of ordinary skill in the art at this time the invention was made to use comparing the shape of the cluster of correlation results with stored shape information and selecting the cluster with the best match to the stored shape information and the threshold value is varied according to an expected correlation peak shape and/or height as taught by Van Vugt in the system of Pelly because Van Vugt provides Pelly an improved method which is capable of providing rapid and highly accurate watermark detection.

Other Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang (U. S. 6,252,971 B1) discloses digital watermarking using phase-shifted stoclustic screens.

Werner et al (U. S. 7, 130,443 B1) disclose watermarking.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (571) 272-7458.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Samir Ahmed, can be reached at (571) 272-7413. The fax phone number for organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Abolfazl Tabatabai/

Primary Examiner, Art Unit 2624

August 14, 2009